## NEW DISTRIBUTION RECORD FOR ISCHNOPTERA BILUNATA (DICTYOPTERA: BLATTELLIDAE)<sup>1</sup>

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ABSTRACT: Occurrence of *Ischnoptera bilunata* in Alabama is reported for the first time. This record extends the known distribution of the species in the United States outside of Florida. Discovery of *I. bilunata* can be credited, in part, to confusion with the Asian cockroach, *Blattella asahinai*.

Ischnoptera bilunata Saussure, was first reported in the United States from Florida in 1990 (Atkinson et al. 1990: treated as the Nicaraguan cockroach, I. bergrothi [Griffini], due to an error in identification). Previously, the species was known from Brazil, Bolivia, Paraguay and Argentina (Princis 1969). Recent collections of I. bilunata in Alabama (Figure 1) extend the known range of this cockroach in the United States outside of Florida.

In July, 1991, five female and five male cockroaches collected in Mobile, Mobile County, Alabama were identified as *I. bilunata*. Individuals were collected in the evening in a residential yard on grass and on a patio around lights. In July, 1992, two females and one male *I. bilunata* were collected in the evening on a house porch around lights in Fair Hope, Baldwin County, Alabama. A third collection was made in the evening of August, 1992, of two female and two male *I. bilunata* in Dothan, Houston County, Alabama near outdoor lights of a supermarket. Specimens from these collections are deposited in the Auburn University Entomological Museum, the Museum of Comparative Zoology at Harvard University, Cambridge, Massachusetts and with the Terminix Insect Collection in Mobile, Alabama.

Before the collections of *I. bilunata*, 21 species of cockroaches were considered established in Alabama (Dakin and Hays 1970, Pratt 1988, Atkinson *et al.* 1991). An additional species, *Blaberus craniifer* Burmeister, has been listed from Lee County as an adventive (Dakin and Hays 1970). The only representative from the genus *Ischnoptera* previously recorded in Alabama is the dark wood cockroach, *I. deropeltiformis* (Brunner). This species is distributed throughout the state, often in wooded areas (Dakin and Hays 1970). All specimens of *I. deropeltiformis* 

<sup>1</sup> Received December 31, 1992. Accepted February 25, 1993.

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Figure 1. Collection sites of adult *Ischnoptera bilunata* Saussure, in Alabama. A: Mobile Co., Mobile, VII-27-1991 (5 males, 5 females); B: Baldwin Co., Fair Hope, VII-27-1992 (1 male, 2 females); C: Houston Co., Dothan, VIII-14-1992 (2 males, 2 females).

in the Auburn University Entomological Museum were collected between the dates of April 24 and August 9. Specimens of *I. bilunata* were collected between July 27 and August 14.

Both sexes of *I. bilunata* are active at night and attracted to light (Atkinson *et al.* 1990). This description agrees with our observations. *Ischnoptera bilunata* also has been recorded as being abundant in open, moist, grassy vegetation on the margins of streams, rivers and ponds (Atkinson *et al.* 1990, 1992). The Alabama collection sites were all adjacent to areas that could be considered open and grassy. Further, these areas had thatch and leaf litter that could retain moisture. However, only the Mobile site had a water source nearby. This consisted of a drainage ditch that, depending on rainfall, was intermittently filled with water.

In 1986, the Asian cockroach, Blattella asahinai Mizukubo was reported from the Tampa area of Florida (Brenner et al. 1986). The Asian cockroach is very similar in appearance to the serious indoor pest, the German cockroach, Blattella germanica (L.). The adults of both Blattella species are 10 to 13 mm in length, brownish both ventrally and dorsally, with two narrow pronotal spots and wings covering the body (Atkinson et al. 1990). Unlike B. germanica, B. asahinai lives outdoors, often in leaf litter and grassy areas and readily flies to lighted areas at night during warmer months (Brenner et al. 1986, 1988). Adult Asian and German cockroaches are similar in appearance to *I. bilunata*. Adult *I. bilunata* are 15 to 18 mm in length, brownish dorsally and black ventrally, with two triangular pronotal spots and wings covering the body (Atkinson et al. 1990). Reports of B. asahinai and corresponding media coverage apparently heightened the awareness of some pest control operators and homeowners about cockroaches around lighted areas in the summer. In the past few years, the Alabama Cooperative Extension Service has received calls each summer about "Asian cockroaches" around porch lights. These reported cockroaches have turned out to be one of the Parcoblatta species and, now, I. bilunata. With the similarities to B. germanica and B. asahinai, we anticipate additional reports of I. bilunata in the future.

## ACKNOWLEDGMENTS

The authors are indebted to Fred Strickland and Donnie Byrne for being observant and interested in collecting many of the specimens. We thank Louis Roth and Tom Atkinson for their assistance in identification of the specimens and review of this manuscript. We also appreciate the comments and assistance from Wheeler Foshee, Wayne Clark and Michael Williams in preparing this manuscript.

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